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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,470	12/29/2004	Jean-Christophe Jaillant	4590-367	2685
33308 7590 08/17/2007 LOWE HAUPTMAN & BERNER, LLP 1700 DIAGONAL ROAD, SUITE 300 ALEXANDRIA, VA 22314			EXAMINER TO, TUAN C	
			ART UNIT 3663	PAPER NUMBER
			MAIL DATE 08/17/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/519,470

Applicant(s)

JAILLANT, JEAN-CHRISTOPHE

Examiner

Tuan C. To

Art Unit

3663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Allowable Subject Matter***

The indicated allowability of claims 4, 5, and 10-13 is withdrawn in view of the newly discovered reference(s) to Briffe et al. (US 6112141A).

Rejections based on the newly cited reference(s) follow.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 6, 14, and 15 recite: "computing a ground path that an aircraft would follow if a turn at the maximum rate". It is unclear whether or not the ground path can be computed if a turn not at maximum rate.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knoll (US 20020010530A1).

Regarding claims 1, and 6, Knoll teaches a flight control display for orientation of the pilot during an approach of the aircraft toward a destination including displaying on a screen the feeler line and a ground path to be captured, in order to determine how place the aircraft in a turn in order to optimize the capture of the path to be captured (see figure 1 and paragraph 0024, the feeler line with arced sections (15, 16, 17) has been shown on the display). Knoll does not point out the step of computing a feeler line ground path that an aircraft would follow, however, such feature is obvious to one skilled in the art because while showing the feeler line on the display, the flight control display system of Knoll should have a computer system for computing such the feeler line.

As to claims 2, 3, and 7-9, Knoll teaches a display control system that guiding the pilot by providing the pilot with a projection of the destination and the final approach direction relative to the aircraft and the aircraft direction. Thus, via the display can control a turn command when the feeler line is tangential to the ground path to be captured, and that the turn command is controlled automatically or by the pilot of the aircraft.

As to claim 10-13, it is well known in the art of experimentation/programming that one derives his or her own formulation/program to perform a system/method.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate an parametric equation as claimed in the aircraft navigation aid method, since it is well known in the art to compute and derive such the parametric equation in order to perform such the method.

As to claim 14, and 15, Knoll teaches a flight control display for orientation of the pilot during an approach of the aircraft toward a destination including displaying on a screen the feeler line and a ground path to be captured, in order to determine how place the aircraft in a turn in order to optimize the capture of the path to be captured (see figure 1 and paragraph 0024, the feeler line with arced sections (15, 16, 17) has been shown on the display). Knoll does not point out the step of computing a feeler line ground path that an aircraft would follow, however, such feature is obvious because while showing the feeler line on the display, the flight control display system of Knoll should have a computer system to compute such the feeler line.

It is well known in the art of experimentation/programming that one derives his or her own formulation/program to perform a system/method.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate an parametric equation as claimed in the aircraft navigation aid method, since it is well known in the art to compute and derive such the parametric equation in order to perform such the method.

**Conclusions**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan C To whose telephone number is (571) 272-6985. The examiner can normally be reached on from 8:00AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner,

A handwritten signature in black ink, appearing to read 'Tuan C To', is written over a horizontal line.

Tuan C To

August 14, 2007